### **AIS Programming Standards**

# **COBOL Coding Standards**

- Standards
- Guidelines

#### **Standards**

- 1. One function or screen per program. Keep programs small and simple.
- 2. Information required in the ID DIVISION includes: PROGRAM-ID, AUTHOR, INSTALLATION, and DATE-COMPLETED.
- 3. All programs will include a description of the program purpose and descriptions and dates of all program modifications. Before the ENVIRONMENT DIVISION begins, a "REMARKS" section must be included. This section will begin with a short description of the program's purpose. This will be followed by list of program modifications (including the installation date of the change, the programmers name and a short description of the change. The list of modifications will be in last-in/first-out order. For example:

```
PROGRAM-ID. (Per AIS Naming Standard)
AUTHOR. (Programmer's first and last name.)
INSTALLATION. (UCLA, Application name)
DATE-COMPLETED. (filled in by the compiler.)

*REMARKS. (sample)

* PROGRAM DESCRIPTION:

* QDB T.O.F.UNLINKED ACCOUNT/FUND REPORT PROGRAM

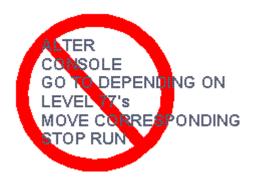
**
*THIS PROGRAM PRODUCES A REPORT FROM TYPE ENTRY 14 TRANSACTIONS
*DATA EXTRACTED FROM THE QDB GL TABLES THAT HAVE A LOCATION/
*ACCOUNT/CC/FUND COMBINATION THAT IS NOT FOUND ON THE FSODAF TABLE.

**

*PROGRAM MODIFICATIONS: (The list of program modifications will
*
* MOD#208-02-95BY: JOHN JONES
*SSR FSM123: INCLUDED CHECK FOR LOCATION/ACCOUNT/CC/FUND
*CLOSED

**
*MOD#1 01-12-96BY: SUE STANDARD
*PPR1234: MODIFIED EXTRACT PROCESS TO IMPROVE PERFORMANCE
**
```

- 4. Data names must be meaningful
- 5. Programs will not include internal sorts.
- 6. Interface to DACSS is required for security checking.
- 7. Interface to ASAP is required if e-mails are to be sent.
- 8. The following COBOL options may NOT be used:



#### Guidelines

- 1. File names for non-report files should end with -IN, -OUT, or -IO; field names for report files should end with -REPORT or -RPT.
- 2. Working Storage data should be arranged to group fields used for similar functions so that they are stored together, e.g., switches literals, constants, etc.
- 3. Data that may change or that is used by more than one program should placed in DB2 tables and not hard coded in programs or COPYLIBs, e.g., error messages, sets of valid values, etc.
- 4. Programs should follow guidelines for 'structured' programming. 'GoTo's should beused primarily to 'go to' an exit of a performed routine.
- 5. Initialize I/O area to 'LOW VALUES' at program entry and re-entry.
- 6. Common sub-routines or COPYLIB code should be created for common functions, e.g., data routines.
- 7. If common sub-routines or COPYLIB code exists for a function it should be used.
- 8. No more than 3 levels of nested 'IF's should be used.
- 9. Use paragraphs and use perform thru command instead of sectional code.
- 10. Paragraph names should identify the function of the paragraph.
- 11. Do not include unnecessary paragraph names, i.e., paragraph names should not be used to supply program documentation instead of comments.
- 12. Comments should be concise.
- 13. Comments should be arranged so as not to be mistaken as program code.

The following standards are required but failure to adhere should not delay turnover. Completion must occur ASAP after implementation:

- 14. Use the ejct command to split up paragraphs for readability.
- 15. Remove obsolete/commented code prior to production move.

#### Related Policy, Procedures or Standards

#### see also:

- Naming Standard
- Walkthrough Standards
- Accountability & Exceptions

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## [<u>AIS</u>]

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